# SCHOOL SPORTS INJURIES

# Facts About Sports-Related\* Injuries in Utah Secondary Schools

- ♦ One-third of reportable\*\* injuries among secondary students are sports-related.
- **❖** Over the past five years, there were 4,589 sports-related injuries among secondary students.
- **♦** The highest number of sports-related injuries occurred in basketball (38%), football (26%), soccer (12%), and baseball/softball (8%).¹



UTAH SCHOOL INJURY REPORT DATA (School years 1999-2000 to 2003-2004)
GRADES 7-12

# **SCOPE OF THE PROBLEM**

### **WHO**

- Males sustained 72% of sports-related injuries.
- Males sustained more sports injuries during 9th grade than any other secondary grade.
- Females sustained the most sports-related injuries during 7th and 8th grades.



### **WHAT**

• The most common types of sports-related injuries were: possible fracture/broken bone (38%), sprain/strain/tear (24%), and bump/bruise/contusion (9%).

#### **WHEN**

- The majority of sports-related injuries (65%) occurred during PE classes.
- Injuries occurred almost equally during athletic events and practice sessions.

#### WHERE

• The most common body areas injured were: ankle (18%), finger/thumb (15%), hand/wrist (9%), and head (8%).



### WHY

• The most common contributing factors to sports-related injuries were: collision (49%), tripped/slipped (15%), and overexertion/twisted (14%).

# **PREVENTION TIPS**

### **Supervision**

- Trained staff/volunteers should supervise all PE classes, practices, and sporting events.
- Coaches, assistants, and PE teachers should be certified in CPR and first aid.
- Supervisors should model appropriate behaviors, teach correct skills, and enforce the correct use of equipment to prevent injuries.

#### PE Classes

- Plan age-appropriate activities.
- Match participants according to size and ability.
- Adapt rules to the skill level of the students and the protective equipment available.

#### **Athletic Teams**

- Require a yearly physical exam by a qualified health care provider before participation.
- Coaches should ensure that all athletes warm up and stretch before each activity, are properly conditioned, and are not subject to excessive training.

### **Injured Students**

- Injuries should be completely healed before students return to play.
- Schools should establish criteria, including requiring clearance by a health care provider, for resuming play after an injury.

### Play Surfaces

- Check indoor and outdoor play surfaces before every activity.
- Maintain playing surfaces by removing debris, filling in holes, and reseeding bare spots.



# SPORT-SPECIFIC INFORMATION

#### Baseball/Softball

- The head (13%), fingers (13%), nose (9%), and ankle (9%) were the most common body areas injured.<sup>1</sup>
- More than one-third of injuries were due to being hit by a thrown object.<sup>1</sup>
- Common injuries include fractures due to sliding, being hit by a ball, and overuse of the throwing arm.
- Require a batting helmet be worn at the plate, when waiting a turn at bat, and when running bases.
- Limit number of throws and teach proper pitching techniques.
- Install breakaway bases on playing fields.

### **Basketball**

- The ankle (27%), fingers (19%), and hand/wrist (7%) were the most common body areas injured. <sup>1</sup>
- Nearly one-half of injuries were due to collisions.<sup>1</sup>
- Encourage players to choose basketball shoes that fit snugly, offer support, and are non-skid. Cotton socks absorb perspiration and give added support to the foot.
- Strength training (particularly knees and shoulders), aerobics (increase strength and endurance of heart and lungs), conditioning activities, proper coaching, and using safety equipment can prevent injuries.

#### Football

- The fingers (18%), hand/wrist (11%), and head (9%) were the most common body areas injured. <sup>1</sup>
- Two-thirds of injuries were due to collisions.<sup>1</sup>
- Minimize blocking below the waist.
- Conduct conditioning activities that strengthen the neck to help keep the head erect during blocks and tackles.
- Emphasize the proper fundamentals of blocking and tackling to help reduce head and neck injuries.
- Schedule regular fluid breaks during practices and games.

#### Soccer

- The ankle (16%), knee (11%), and hand/wrist (10%) were the most common body areas injured.<sup>1</sup>
- More than one-half of injuries were due to collisions.<sup>1</sup>
- Make sure that all players stretch ankles prior to play and always wear shin guards.
- Teach proper heading technique to decrease force of impact to head.
- Secure portable goals, even when not in use.
- Ensure that players adhere to the rules of the game when tackling.



EXAMPLE 1: An 11<sup>th</sup> grader missed half the school year after taking a direct hit to his helmet during a football game. An on-site EMT and certified athletic trainer gave immediate care that likely saved the student's life.

PREVENTION: Teach correct skills, like proper tackling technique. Athletic trainers

should be present during all games and

practices.

EXAMPLE 2: An 8<sup>th</sup> grader was trying to dunk a basketball by jumping off the back of his friend. After grabbing the rim he fell to the floor and broke his arm.

PREVENTION: Establish and enforce safety rules for all classes and activities Closely supervise students at all times.

EXAMPLE 3: A 10<sup>th</sup> grader was playing soccer with a broken nose when he was kicked in the face during a game. He reinjured his nose and missed 10 days of school.

PREVENTION: Injuries should be completely healed before students return to play.

EXAMPLE 4: A 10<sup>th</sup> grader was fouled in a basketball game and suffered a concussion. She was removed from the game and taken to a doctor for evaluation.

PREVENTION: Schools should establish criteria for reentering play after an injury. Athletes should not be allowed to play after a concussion until receiving medical clearance.

EXAMPLE 5: An 11<sup>th</sup> grader playing catcher for his baseball team was walking back to the plate area without his mask on and was struck by an upcoming batter taking a practice swing. He underwent facial surgery and missed 8 days of school.

PREVENTION: Athletes should wear safety gear at all times. Athletes should pay attention to activities going on around them.

# THE IMPORTANCE OF ON-SITE ATHLETIC TRAINERS

Certified athletic trainers are responsible for watching over and caring for athletes in an effort to prevent injuries before they happen. The American Medical Association encourages all high school administrators, athletic directors, and coaches to undertake appropriate measures to provide the services of a certified athletic trainer to all high school athletes.<sup>2</sup>

<sup>\*</sup> Sports-related injuries include the following activities: baseball, basketball, football, kickball, soccer, softball, track and field, volleyball, and wrestling. \*\*All reportable injuries meet the following criteria: Any injury that is severe enough to cause the loss of one-half day or more of school or warrants medical attention and treatment (e.g., school nurse, MD, ED staff, etc.). 1 Utah Department of Health, Student Injury Report Data. 2 American Medical Association, http://www.ama-assn.org/apps/pf\_online/pf\_online.